

LISTING OF CLAIMS

What is claimed is:

1-11. (Canceled)

12. (Original) An assembly to locate a well tool in a cased borehole, comprising:

a reference member having first and second slips and first and second cones engaging said first and second slips respectively;

said first and second cones having overlapping portions;

a ratchet member disposed between said overlapping portions allowing the separation of said cones but preventing their contraction; and

an orientation surface mounted on said first or said second slip.

13. (Original) The assembly of claim 12 wherein said ratchet member is disposed on one of said first and second cones and the other of said first and second cones having wickers, said ratchet member having ratchet teeth engaging said wickers.

14. (Original) The assembly of claim 12 wherein said orientation surface includes an inclined surface with an apex and a slot adapted to receive an orientation key.

15. (Original) The assembly of claim 12 wherein said orientation surface is an orientation key.

16. (Original) The assembly of claim 12 further including an expansion joint on one of said first and second cones.

17. (Original) The assembly of claim 12 further including a setting member to separate said first and second cones.

18. (Original) The assembly of claim 17 wherein said setting member includes piston members releasably attached to said cones, said pistons being hydraulically actuated to move said cones into engagement with said slips.

19. (Original) The assembly of claim 17 wherein said setting member removably supports one of said cones.

20-23. (Canceled)

24 (Currently Amended) A method of installing a well tool in a cased borehole for performing a well operation, The method of claim 22 comprising:

lowering a reference member and an anchor member with the well tool into the cased borehole;

lowering a whipstock and a mill with the reference member and anchor member; and

setting the reference member within the cased borehole;

then setting the anchor member in the cased borehole;

detaching the mill from the whipstock and milling a window into the cased borehole; and
performing the well operation with the well tool.

25. (Original) A method for setting a marker in the borehole of a well, comprising:

running a reference member and orientation tool into the borehole;

determining the orientation of the reference member;

rotating the reference member;

repeating the determining and rotating steps until the reference member is properly oriented in the borehole;

permanently setting the reference member within the borehole;
lowering a locator member with anchor and well tool into the borehole;
orienting the locator member on an orientation member on the reference member;
setting the anchor member; and
performing a well operation with the well tool.

26. (Original) A method for milling a window in a cased wellbore, comprising:

disposing into the wellbore a reference member, a reference member setting tool and a sidetracking assembly including an anchor, whipstock and a mill adapted to mill the window in the cased wellbore;

determining the orientation of the reference member within the cased wellbore;

operating the setting tool, either before or after determining the orientation of the reference member, to set the reference member within the cased wellbore;

setting the anchor; and

milling the window in the cased wellbore.

27. (Original) The method of claim 26 wherein the setting tool is released from the reference member after the reference member is set.

28. (Original) The method of claim 26 wherein the setting tool comprises actuating a piston assembly within the setting tool causing a camming member in the reference member to expand slips into engagement with the cased borehole.

29. (Original) The method of claim 28 wherein the anchor includes a setting tool and the anchor setting tool sets the anchor in the cased borehole.

30. (Original) The method of claim 28 wherein the setting tool sets the anchor.
31. (Original) The method of claim 26 further comprising
releasing the setting tool from the reference member; and
removing the setting tool from the wellbore.
32. (Original) A method of conducting sidetracking operations, comprising:
conducting a first run into a borehole to:
set a reference member,
orient a whipstock,
set an anchor within the borehole, and
mill a window in the borehole,
conducting a second run into the borehole to:
land and orient a deflector within the borehole, and
conduct lateral operations within the borehole.
33. (Original) The method of claim 32 wherein a locator member is mounted on the deflector and engages the reference member to orient the deflector within the borehole using an orienting profile.
34. (Original) An apparatus for conducting sidetracking operations within a borehole comprising:
a reference member;
a setting tool affixed to an anchor assembly for setting the reference member within the borehole, the anchor assembly including an anchor and a setting tool for setting the anchor; and

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a whipstock affixed to the packer assembly for use in milling a window in a portion of the borehole.

35. (Original) The apparatus of claim 34 wherein the reference member setting tool, whipstock and anchor assembly are selectively removable from the borehole.

36. (Original) The apparatus of claim 34 wherein the reference member setting tool comprises a reciprocable piston member that is actuated to set a cam slips into engagement with the cased borehole to secure the reference member within the borehole.

37. (Canceled)